

STATUS OF THE CLAIMS

Claims 1-21 were originally filed in this patent application. In response to the first office action dated 8/30/2005, applicants filed an amendment on 11/30/2005 that cancelled claims 12, 13, 17, 18, 20 and 21 and amended claims 1, 4-6, 9-11, 16 and 19. In response to the second office action dated 02/06/2006, an RCE and Amendment were filed on 05/04/2006. In response to the third office action dated 07/12/2006, an amendment was filed on 10/11/2006 that amended claims 1, 4-6, 9-11, 16 and 19. In response to the fourth office action dated 12/04/2006, an RCE and Amendment were filed on 03/02/2007 that cancelled claims 2-3, 7-8, and 14-15. In the pending fifth office action, claims 1, 4-6, 9-11, 16, and 19 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Application Publication 2003/0084030 to Day *et al.* (hereinafter “Day”) in view of U.S. Patent Application Publication 2002/0112102 to Tarui *et al.* (hereinafter “Tarui”) and further in view of U.S. Patent Application Publication 2003/0163641 to Kaneko. No claim was allowed. In this amendment, claims 1, 6, and 11 have been cancelled and claims 22-24 have been added. Claims 4-5, 9-10, 16, 19, and 22-24 are currently pending.

REMARKS

Amendment to claims 16 and 19

Claims 16 and 19 have been amended herein to recite both the program product and recordable media are computer readable to assure the subject matter of these claims falls within the scope of statutory subject matter under 35 U.S.C. §101.

Rejection of claims 1, 4-6, 9-11, 16 and 19

The examiner rejected claims 1, 4-6, 9-11, 16, and 19 under 35 U.S.C. §103(a) as being unpatentable over Day in view of Tarui and further in view of Kaneko. Claims 1, 6, and 11 have been cancelled herein, and therefore need not be discussed. The remaining claims are discussed below.

Claim 4

In rejecting claim 1, which the examiner cites in the rejection for claim 4, the examiner states:

Day and Tarui do not expressly disclose the claim's aspects of suspends/resumes **all** of the plurality of the logical partition [sic]. However, Kaneko's paragraph 31 discloses a storage subsystem with I/O resources being assigned separately to plurality of the logical partitions.

Paragraph 31 of Kaneko reads:

Under this coordinated access operation over the information storing disk array units, this cluster disk subsystem is logically partitioned during the operation so that the cluster resulting from the division can be assigned to and used by different users. This logical partitioning is executed by ordering the cluster coupler 30 to separate the units by software as mentioned below.

The examiner goes on to state, “Kaneko further discloses an I/O reconfiguration including **all** of the logical partition [sic] are suspended...”, and cites to paragraph 32.

The examiner also cites paragraph 32 of Kaneko as teaching “all of the logical partition [sic] are suspended”. Kaneko states, “As seen in the flowcharts, the whole system is switched to a disconnection standby mode (step 31).” Applicants respectfully assert the suspension of all the logical partitions in Kaneko does not read on the suspension of all the logical partitions in claim 4. Claim 4 recites, “suspending all of the plurality of logical partitions...”, but the plurality of logical partitions in claim 4 comprises “at least one logical partition that owns identified I/O and at least one logical partition that does not own the identified I/O”. Kaneko teaches that all of the logical partitions are suspended, but all of the logical partitions own the resources spoken of. Paragraph 28 states:

“Therefore, according to this embodiment, each disk array unit of the cluster disk subsystem can refer to or update (hereafter, referred to as access) the resources (specifically, the cache storage devices and common storage devices) of the other disk array units that constitute the cluster”

Therefore, according to the language in Kaneko quoted above, all of the partitions have access the resources in each of the other partitions. This means that even if all of the partitions are suspended, only the partitions that own the resources have been suspended, similar to the teaching in Tarui.

Because each logical partition in Kaneko can access the shared resources in all the other logical partitions, Kaneko must stop all the logical partitions. However, stopping all the logical partitions in Kaneko only reads on stopping logical partitions that own identified I/O. Nowhere do any of Day, Tarui or Kaneko teach or suggest suspending all logical partitions, where some of the logical partitions do not own the identified I/O. As a result, claim 4 is allowable over the combination of Day, Tarui and Kaneko, and

applicants respectfully request reconsideration of the examiner's rejection of claim 4 under 35 U.S.C. §103(a).

Claims 5, 9-10, 16, and 19

The rest of the rejected claims, namely claims 5, 9-10, 16 and 19, include limitations similar to the limitations in claim 4 discussed above, and are therefore allowable for the same reasons given above for claim 4. Applicants respectfully request reconsideration of the examiner's rejection of claims 5, 9-10, 16, and 19 under 35 U.S.C. §103(a).

New claims 22-24

Claims 22-24 have been added to claim the loop rebalancing shown in applicants' FIG. 8. None of the cited art teach the loop rebalancing in these claims, so these claims are allowable over the known prior art.

Conclusion

In summary, none of the cited art, either alone or in combination, teaches, supports, or suggests the unique combination of features in applicants' claims presently on file. Therefore, applicants respectfully assert that all of applicants' claims are allowable. Such allowance at an early date is respectfully requested. The Examiner is invited to telephone the undersigned if this would in any way advance the prosecution of this case.

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